

REMARKS

The Examiner rejected the present invention over Menjak (U.S. Patent No. 6,619,444) in view of Carlson (WO 99/06731).

Figure 2 of Menjak shows an MR fluid 50. However, this fluid is disposed between the inner peripheral surface of the stator 48 and the outer peripheral surface of the rotor 42, and its arrangement has no relationship to the shaft 31.

Figures 4a and 4b of Carlson also show that an MR fluid 38a is disposed in chambers 32a, 34a at the inner peripheral surface side of a housing 22a. However, this MR fluid 38a is disposed between the chambers 32a, 34a at the inner peripheral surface side of the housing and the outer peripheral surface side of the ball bearing. That is, the MR fluid 38a is not arranged at the outer peripheral surface of the shaft. Although a slight gap is disposed at the lateral surface side of the outer ring side of the ball bearing, the MR fluid 38a cannot reach the outer peripheral surface of the shaft since a retainer or similar device is disposed between the lateral surface side of the inner ring side of the ball bearing and the permanent magnet 25a.

Thus, Carlson does not disclose that the magnetic fluid is provided to close the gaps between the motor shaft and the discs is correct.

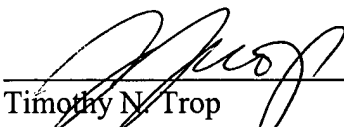
In addition, the Examiner found that the housing 22a of Carlson corresponds to the annular disc of the present invention. However, the housing 22a of Carlson corresponds to the fixed body 6 of the present invention, the function of which housing is completely different from that of the annular disc.

The claims recite “the annular disc arranged so as to be in contact with an inside wall surface of the housing,” whereby the housing and the annular disc are clearly distinguished with each other. Further, in Carlson, the housing 22a does not hold one side of the permanent magnet 25. The permanent magnet 25 of Carlson is constructed so that it rotates with the shaft. Thus, if the housing 22a holds one side of the permanent magnet 25, the permanent magnet 25 cannot rotate, resulting in that the shaft also cannot rotate. Accordingly, the claimed invention is totally different from Carlson.

In view of these remarks, the application should now be in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested.

Respectfully submitted,

Date: December 13, 2004



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